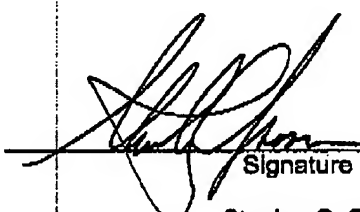RECEIVED
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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional)
	SCS-550-548

	Application Number	Filed
	10/840,233	May 7, 2004
	First Named Inventor STEVENS	
C. Spooner	Art Unit 2609	Examiner E. Yeh

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
   Note: No more than five (5) pages may be provided.

I am the
- ☐ Applicant/Inventor
- ☐ Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)
- ☒ Attorney or agent of record   27,393
                                     (Reg. No.)
- ☐ Attorney or agent acting under 37CFR 1.34.
   Registration number if acting under 37 C.F.R. § 1.34 _____

Signature

Stanley C. Spooner
Typed or printed name

703-816-4028
Requester's telephone number

March 28, 2008
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

☒ *Total of 1 form/s are submitted.

1319088

STATEMENT OF ARGUMENTS IN SUPPORT OF
PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following listing of clear errors in the Examiner's rejection and his failure to identify essential elements necessary for a *prima facie* basis of rejection is responsive to the Final Official Action mailed November 30, 2007 (Paper No. 20071127).

Error #1. None of the three cited references teach the claimed "complexity measure"

Applicant's independent claims 1, 20 and 39 all require the derivation of a "complexity measure indicative of an amount of data processing required to perform at least one further processing stage of said processing operation upon said at least one data block." This aspect of the independent claims is simply missing from each of the three cited references. The Examiner admits in the first paragraph of page 4 of the Final Rejection that "Ogoro does not explicitly disclose one or more features to derive complexity measure . . . ." This admission is very much appreciated.

The Examiner alleges that the Kim reference "teaches many features for the complexity measure." However, the "complexity measure" disclosed in Kim does not comply with the definition of "complexity measure" in Applicant's independent claims. For example, Kim merely discloses that "the complexity measure . . . is relatively invariant . . ." (paragraph 0111 as quoted by the Examiner). Additionally Kim specifies that "[t]he complexity measure $C_{g,i}$ . . . is substantially QP invariant" (paragraph 0113 also as quoted by the Examiner). Neither of these passages support the Examiner's argument that there is disclosed a complexity measure "indicative of an amount of data processing required to perform at least one further processing stage of said processing operation upon said at least one data block" as required by the present independent claims.

The third reference, Lavelle, has no mention of any "complexity measure" and instead references "scene complexity" and "higher depth complexity" in the portions cited by the Examiner

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on page 5 of the Final Rejection. The term "scene complexity" in paragraph 193 of Lavelle as

referenced by the Examiner is simply a factor upon which an animation rate depends. Lavelle is

silent with respect to how "scene complexity" is derived. The term "depth complexity" is defined in

paragraph 252 as referring to the average number of attempts to update each sample per scene.

Neither of these definitions have anything to do with the "complexity measure" as defined in

independent claims 1, 20 and 39.

Therefore, the Examiner has committed reversible error by alleging that Kim and/or Lavelle

disclose the claimed "complexity measure" as defined in independent claims 1, 20 and 39.

**Error #2. Even if Ogoro, Kim and Lavelle were combined in the
manner suggested by the Examiner there is no disclosure of this
claimed feature of independent claims 1, 20 and 39**

Without at least one reference teaching or suggesting the claimed feature of a

"complexity measure," there is simply no *prima facie* case of obviousness under 35 USC §103

and any further rejection thereunder is respectfully traversed.

**Error #3. The Examiner fails to provide any reason or motivation for
combining the Ogoro, Kim and Lavelle references**

As the Court of Appeals for the Federal Circuit has consistently held, the Examiner must

provide some reason or motivation for combining portions of various references in the manner

set out in the applicant's claims. Moreover, in its recent decision, the U.S. Supreme Court in

KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (April 2007), held that "[t]o facilitate

review [of the reasons for combining elements from different references], this analysis should be

made explicit." *Id.* at 1396. The Court in its *KSR* decision went on to say that it followed the

Court of Appeals for the Federal Circuit's advice that "rejections on obviousness grounds <u>cannot</u>

<u>be sustained by mere conclusory statements</u>; instead, there must be some articulated reasoning

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PAGE 4/7 * RCVD AT 3/28/2008 1:18:08 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/38 * DNIS:2738300 * CSID:703 816 4100 * DURATION (mm-ss):01-24

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with some rational underpinning to support the legal conclusion of obviousness" (emphasis added -the Supreme Court quoting from the Court of Appeals for the Federal Circuit in *In re Kahn*, 78 USPQ2d 1329 (Fed. Cir. 2006)).

The Examiner alleges in the last paragraph on page 5 of the Final Rejection that the only reason to combine the three references is in order to "dynamically adjust a number of rendering passes to achieve a targeted quality constrain" as disclosed in Lavelle, paragraph 3, line 3. The Examiner has not indicated how or why this has anything to do with the claimed "complexity measure" or the benefit of the claimed invention which is directed to the problem of controlling a performance parameter of a data processing apparatus and making it more responsive to sudden changes in the processing work required to perform a processing operation on successive data blocks.

At best, the Examiner's rationale in the last paragraph on page 5 is a mere conclusory statement as to obviousness and clearly fails to provide the "explicit" analysis required by the Supreme Court.

Error #4. The Examiner apparently fails to appreciate that Kim would lead one of ordinary skill in the art away from the claimed combination

The Kim reference, in teaching that a "complexity measure" would be a bit count for an image frame, would clearly lead those of ordinary skill in the art away from the "complexity measure" definition recited in independent claims 1, 20 and 39, i.e., "an amount of data processing required to perform at least one further processing stage of said processing operation upon said at least one data block."

Therefore, the Kim reference would clearly lead one of ordinary skill in the art away from the claimed combination of elements and method steps set out in the independent claims.

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Error #5. The Examiner apparently fails to appreciate that Lavelle would lead one of ordinary skill in the art away from the claimed combination

Assuming for the purpose of argument that the Ogoro, Kim and Lavelle references teach the subject matter alleged by the Examiner, the Examiner appears to ignore the fact that the Lavelle reference is directed to a completely different problem from that to which the present invention is directed. Specifically, Lavelle is directed to the problem of providing a graphical computing system and corresponding control methodologies capable of maintain a target sample density of an image in spite of variations in window size (Lavelle paragraph 5).

The present invention is directed to controlling a performance parameter of a data processing apparatus to be more responsive to changes in the processing work required. Again, because Lavelle is directed to a different problem, there would be no reason to disregard Lavelle and instead modify it with teachings from the Ogoro and Kim references. Accordingly, the Lavelle reference would lead one of ordinary skill in the art away from the Ogoro, Kim and Lavelle combination, let alone the combination of elements recited in Applicant's independent claims.

Error #6. The Examiner appears to ignore the inventive benefit of the invention claimed

It would take ingenuity for the skilled person to realize that the count of constituent image items of an image rendering display list provides a reliable estimate of processing work associated with the rendering of a field of a frame. One would have to realize that the claimed "complexity measure" is easily derived in a data processing system having the deferred rendering graphics processor and then combine it with the other features of Applicant's independent claims. There is simply no prior art reference or combination of references that

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discloses the claimed "complexity measure," let alone the claimed method steps involving the defined "complexity measure."

There is simply no *prima facie* case of obviousness set out in the outstanding Official Action with respect to independent claims 1, 20 and 39. Moreover, given that there is no *prima facie* case of obviousness of the independent claims 1, 20 and 39, there can be no basis for obviousness of any claims dependent thereon.

SUMMARY

The Examiner admits (in the case of Ogoro) or the above analysis shows (in the case of Kim and Lavelle) that the cited prior art does not disclose the claimed "complexity measure." Therefore, even if combined, the references cannot render obvious the invention. Furthermore, the Examiner has not provided the required "reason" for combining references required by the Supreme Court. Finally, the Examiner has apparently ignored the fact that both Kim and Lavelle would lead one of ordinary skill in the art away from the combination of independent claims 1, 20 and 39 and claims dependent thereon.

As a result of the above, there is simply no support for the rejection of Applicants' independent claims 1, 20 and 39 or claims dependent thereon under 35 USC §103. Applicant respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.

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